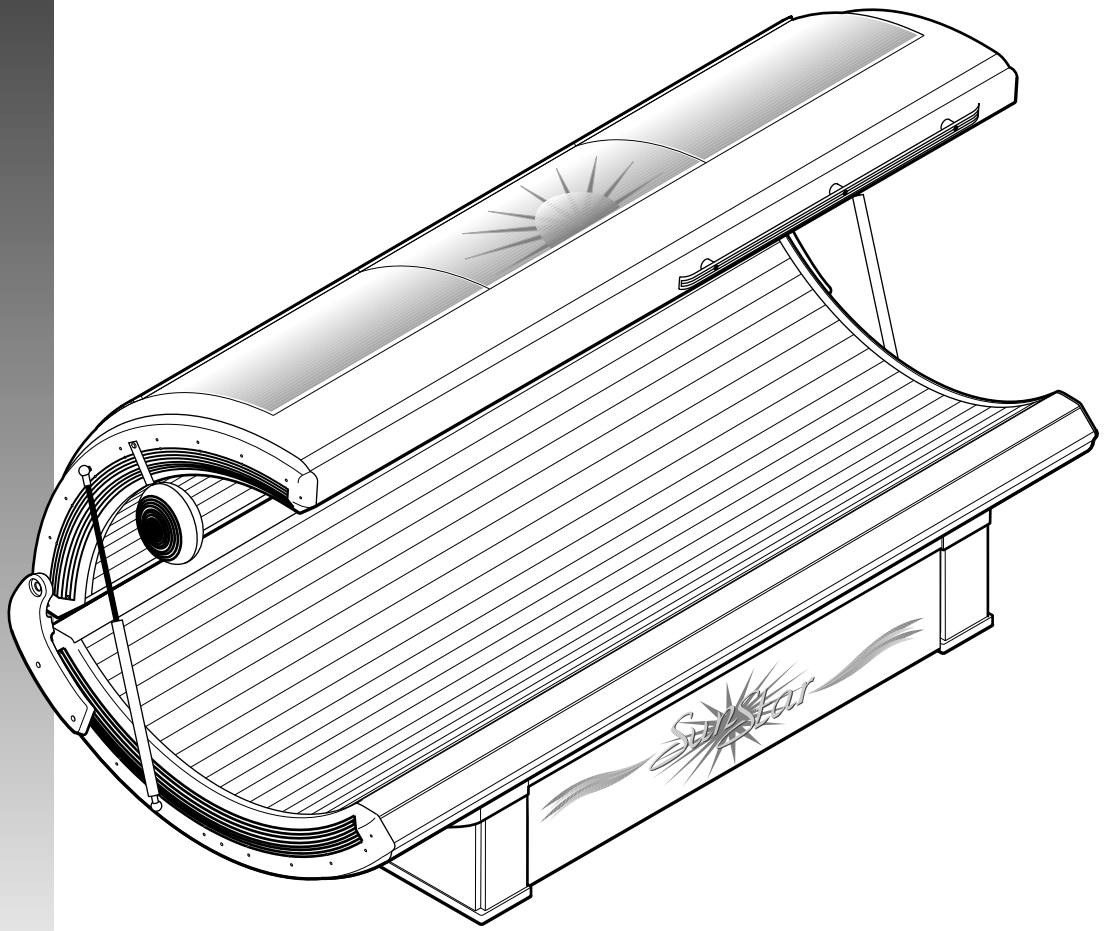
SunStar®

USER GUIDE



MODELS SUPER ZX 44 VS-R™
SUPER ZX 44 VS-R™ 3F

22414A

Limited Lifetime Warranty

SunStar® warrants your tanning unit to be free of structural defects in its material and workmanship, under normal use, for its lifetime. **SunStar** will repair or replace, at their discretion, any defect to the structure which affects the performance of the unit.

For 6 months from the date of purchase, **SunStar** will provide replacements for parts that prove to be defective in material or workmanship. Acrylic shields, fluorescent lamps, and lamp starters are excluded from this warranty. Labor will be covered for 30 days from purchase date. Normal wear, damage from misuse or abuse, damage incurred in transit, or damage done by unauthorized repairs or modifications are not covered by this warranty.

ETS, Inc. disclaims any implied warranty of merchantability or fitness for any period beyond the expressed warranty. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

No one has authority to change or modify this Limited Lifetime Warranty in any respect. To obtain service under the Limited Lifetime Warranty, contact ETS, Inc. at 1-800-228-6292, and ask for the Technical Service Department.

ETS, Inc. SHALL NOT BE LIABLE FOR LOSS OF USE, LOSS OF TIME , INCONVENIENCE, RENTAL OR SUBSTITUTE PRODUCTS, LOSS OF BUSINESS, LOSS OF INCOME, OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which may vary from state to state.

All warranty service must be performed by an authorized service person. If your tanning unit must be returned for service, all freight charges must be at your expense. Contact your place of purchase for the address of the **SunStar** Service Center nearest you. Proof of purchase is required to obtain warranty service.

This warranty covers the original purchaser only. This warranty is void if the unit is modified in any manner from its original design.

Welcome

Congratulations on your purchase of this technologically advanced sun tanning unit. It has been designed to provide years of dependable service for you.

Please read all the instructions in this booklet before installing and using the unit. Always be sure to observe all safety precautions.

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Safety Information

LABELING NOTICE: Labels are affixed on all systems to inform the user of possible dangers. Regulations are stated in 21 CFR, Section 1040.20, and require that all products manufactured after September 8, 1986 which use sunlamps must display the following:

DANGER Ultraviolet radiation. Follow instructions. Avoid overexposure. As with natural sunlight, overexposure can cause eye and skin injury and allergic reactions. Repeated exposure may cause premature aging of the skin and skin cancer. WEAR PROTECTIVE EYEWEAR; FAILURE TO MAY RESULT IN SEVERE BURNS OR LONGTERM INJURY TO THE EYES.

Medications or cosmetics may increase your sensitivity to the ultraviolet radiation. Consult physician before using sunlamp if you are using medications or have a history of skin problems or believe yourself especially sensitive to sunlight. If you do not tan in the sun, you are unlikely to tan from the use of this product.

Minimum use distance from face tanner (if equipped) is 1 inch or 2.54 centimeters. Minimum use distance elsewhere is touching the clear plastic panels. Do not use without clear plastic panels (or wire grid for models using wire grid) in place. Tanning normally appears after the first few sessions and maximizes after approximately four weeks. Tan once or twice per week thereafter to maintain appearance. Frequency of sessions should be limited to every other day. Persons already having a base tan may begin at advanced levels corresponding to the extent of their base tan.

RECOMMENDED EXPOSURE TIMES IN MINUTES						**MAXIMUM EXPOSURE TIME IS 10 MINUTES**
Skin Type:	**Week # Session #**	**Week 1 1st-3rd**	**Week 2 4th-6th**	**Week 3 7th-10th**	**Week 4 11th-13th**	**Subsequent Maximum**
I **Sensitive Skin**	**(Burns easily and severely and does not tan.)**	**NOT RECOMMENDED FOR TANNING**				
II **Light**	**(Burns easily and severely and tans minimally.)**	**2**	**4**	**6**	**8**	**10**
III **Normal**	**(Burns moderately and tans average.)**	**3**	**5**	**7**	**10**	**10**
IV **Dark**	**(Burns minimally, tans easily and above average.)**	**4**	**6**	**8**	**10**	**10**

New lamps emit approximately 20% more ultraviolet radiation during the first 50 hours of operation. Recommended tanning times should therefore be reduced by approximately 20% during that period.

WARNING: • Read the instructions booklet before using this sunlamp product. • To use, lie down under canopy and pull down as far as adjustment will allow. All persons in the room should wear protective eyewear when lamps are on. • Recommended eyewear: provided eyeshields (Lucas Products Super Sunnies or Intrexco No. 5635/1) or equivalent eyewear as defined under 21 CFR 1040.20. Other types of eyewear may not provide adequate protection. • Disconnect power cord before attempting to clean, relamp, or engage in the maintenance of this product.

ONLY THE FOLLOWING LAMPS HAVE BEEN CERTIFIED FOR USE IN THE MODEL SUPER ZX44 VS-R™:

ACCELERATOR® VS-R™ Wolff® Model VAC75-T12-160W Bi-Pin
ACCELERATOR® VHO Wolff® Model ACC75-T12-160W BI-PIN

ONLY THE FOLLOWING LAMPS HAVE BEEN CERTIFIED FOR USE IN THE MODEL SUPER ZX44 VS-R™ 3F:

ACCELERATOR® VS-R™ Wolff® Model VAC75-T12-160W Bi-Pin
ACCELERATOR® VHO Wolff® Model ACC75-T12-160W BI-PIN
Philips Model HPA 400/30s or CosmoTech Model 23045 or CosmoTech 20046 (Facial Unit)

THIS EQUIPMENT MUST BE EARTH GROUNDED.
THIS PRODUCT IS IN CONFORMITY WITH PERFORMANCE STANDARDS FOR SUN LAMP PRODUCTS UNDER 21 CFR PART 1040.20

Installation

Unpacking and Inspection

Your sunbed comes in two cardboard cartons, one for the bench and one for the canopy. Open the cartons and remove the canopy and bench as follows.

The canopy and bench are each wrapped in plastic. Pull away the plastic and, with a helper, grasp the canopy and pull it from the carton bottom, leaving the plastic wrap and the carton packaging. Next, remove the bench from its box by lifting it directly up and out of the box, clearing the ballast trays located below. The ballast trays contain a positioning bolt which protrudes from the back of them. You may need to tilt the bench unit slightly to clear the bolts when removing. Remove the ballast trays from the pallet by removing the screws from the tray hold down bracket. The trays are in proper orientation in the box. Note this when removing.

Note! The cartons and other packing materials are reusable, in the unlikely event that you may find it necessary to return your sunbed.

The canopy box contains the canopy unit, a pair of gas springs, and the body fans.

The bench box contains the following items:

- Bench Unit
- Box containing necessary assembly hardware, panel key, canopy handle, remote bypass, safety goggles, and pillow
- Ballast trays
- Box containing the front access panel.

Inspect these items, including the canopy and bench, and make sure they are free from any visible damage. Report the extent of any damage to the transportation company.

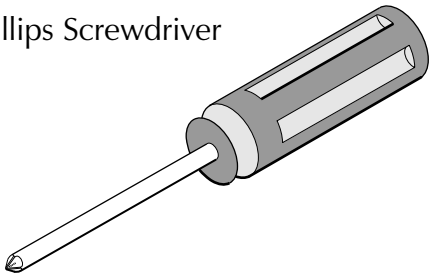
Record the serial numbers of the canopy and bench in the area provided on the back of this manual. This information will be required whenever you call customer service.

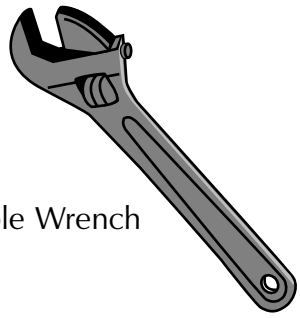
NOTE! Throughout this manual are pictures of, and references to, the ballast tray assemblies. The ballast trays shown are for reference only. Your ballast trays may differ slightly in componentry, however instructions are identical for all units.

Tools Required

You will need the following tools to assemble your sunbed:

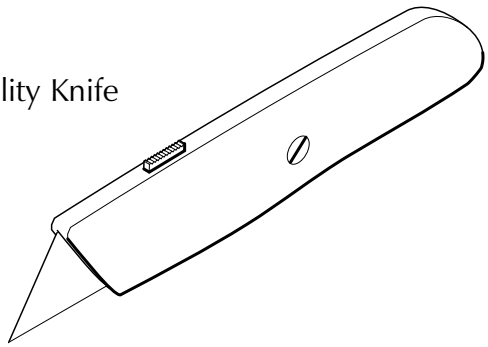
#2 Phillips Screwdriver





Adjustable Wrench

Utility Knife



Pre-Installation Planning

Before you begin to assemble your sunbed, you should observe the following pre-installation considerations.

- Your sunbed operates from a 220V AC source. The unit must be wired to a dedicated circuit using an armored cable. This cable and its associated wires are to be provided by your electrician. See *Electrical Connections* for the location of the power distribution block and supply line routing.

- **IMPORTANT!** Voltage must be below 230V AC or may require a Buck Booster, contact ETS service at the number on the back of this guide. Use of a voltage source above 230V AC may reduce the life of some components in your sunbed.

- **The SunStar® ZX44 VS-R™ and SunStar® ZX44 VS-R™ 3F** require a dedicated circuit capable of providing **60 Amp** service. These units must be hardwired directly to a junction box.

- Make sure the room in which you intend to use your sunbed is well ventilated. Air from the room is used to cool the sunbed, and a poorly ventilated room may cause the unit to become hot and cause discomfort to the user.

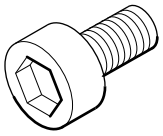
- Your sunbed is designed to operate in an ambient room temperature of 80°F maximum and 70% relative humidity.

- Place your sunbed no closer than 6" from any wall. Make sure that curtains, drapes, and other room furnishings do not obstruct the airflow into the end caps or out of the fan opening areas.

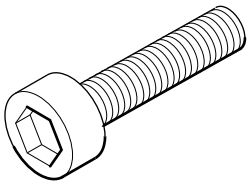
- Proper assembly of your sunbed requires three people. Plan to have a couple of helpers assist you.

Assembly Procedures

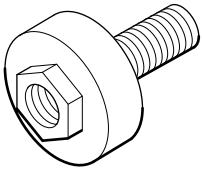
Hardware Inventory



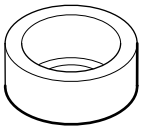
Bolt, M8X12
Quantity 2



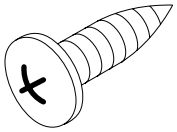
Bolt, M8X35
Quantity 4



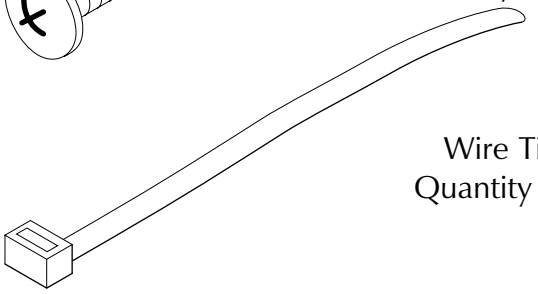
Pivot Stud
Quantity 2



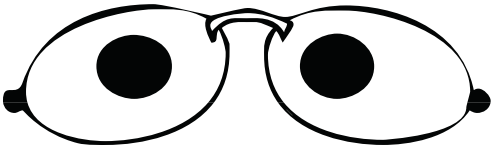
Hinge Washer Insert
Quantity 2



Screw, #10X1/2″
Quantity 26

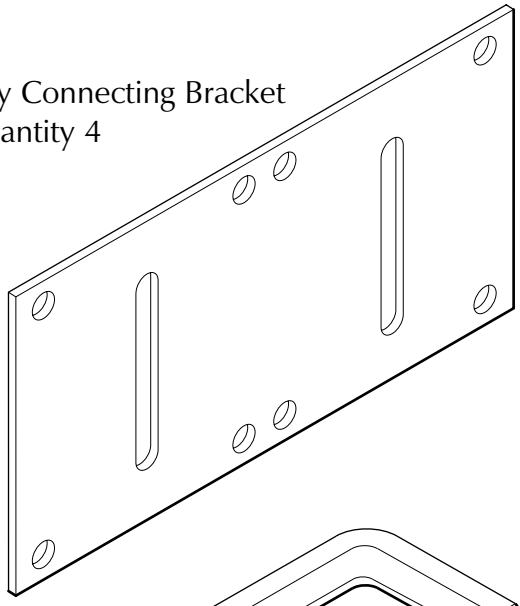


Wire Tie
Quantity 3

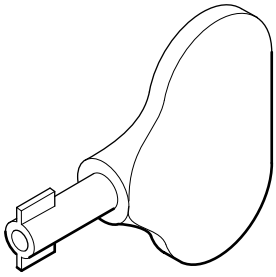


Goggles
Quantity 1

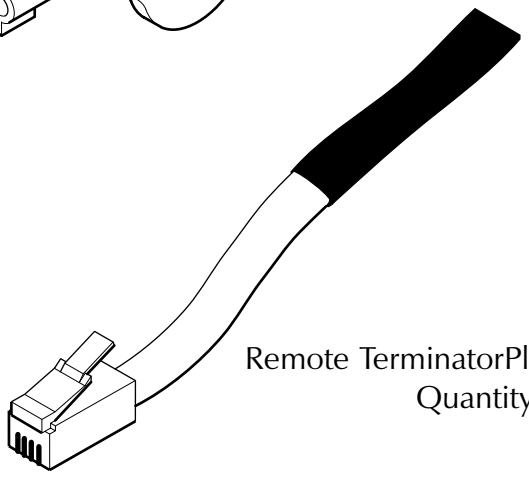
Tray Connecting Bracket
Quantity 4



Allen Wrench
Quantity 1



Access Panel Key
Quantity 1



Remote TerminatorPlug
Quantity 1

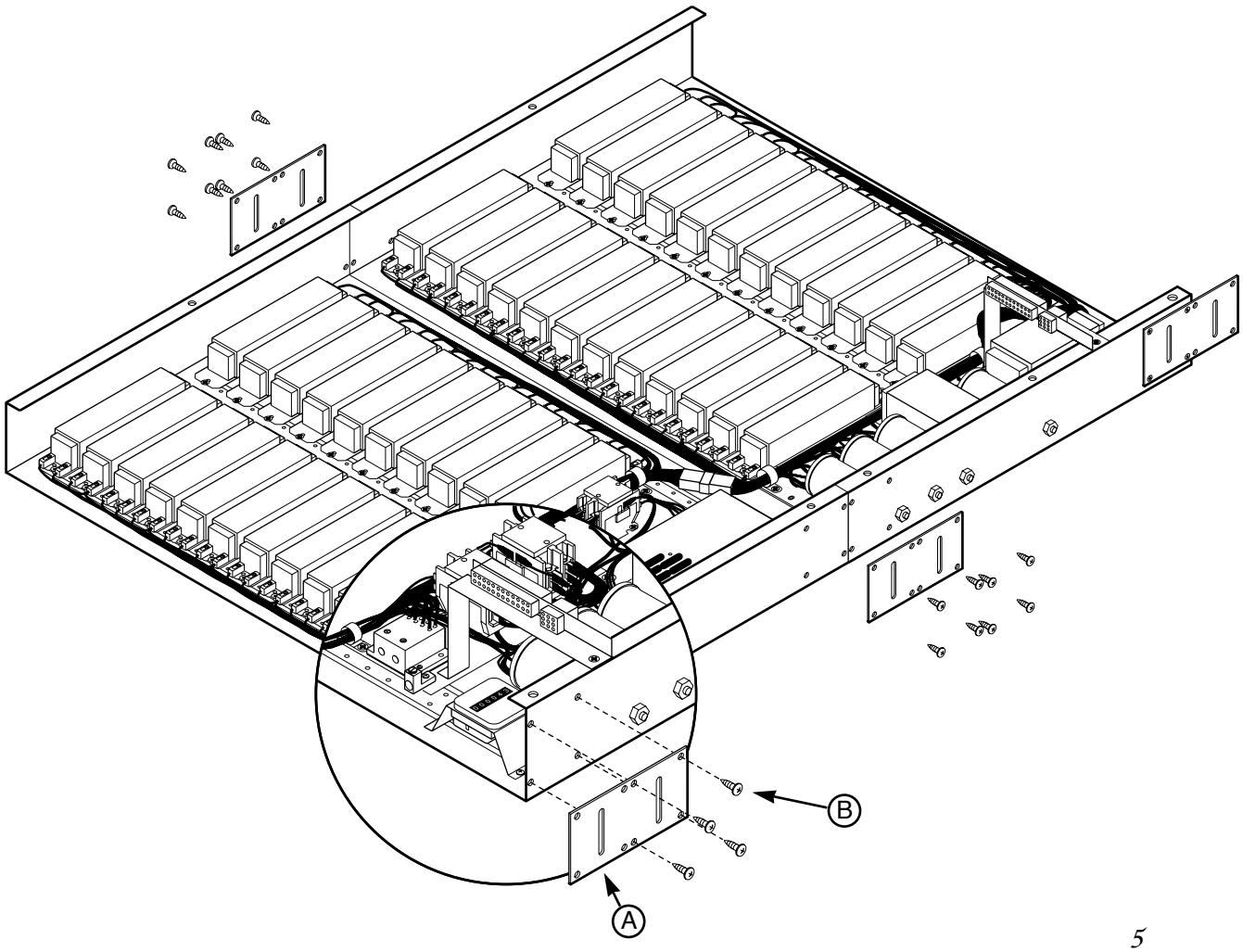
Ballast Tray Assembly

1. Place the ballast tray assemblies approximately where you want the sunbed to be located. The completed tray assembly will be difficult to move once assembled.

NOTE: The ballast trays are shipped in their correct positions under the sunbed bench. If these positions were not noted during unpacking see the illustration located on page 12.

2. Place the four tray connecting brackets (A) against the ballast trays as shown, lining up the holes in the bracket with the holes in the trays. Fasten the brackets to the trays using the #10X1/2″ screws (B).

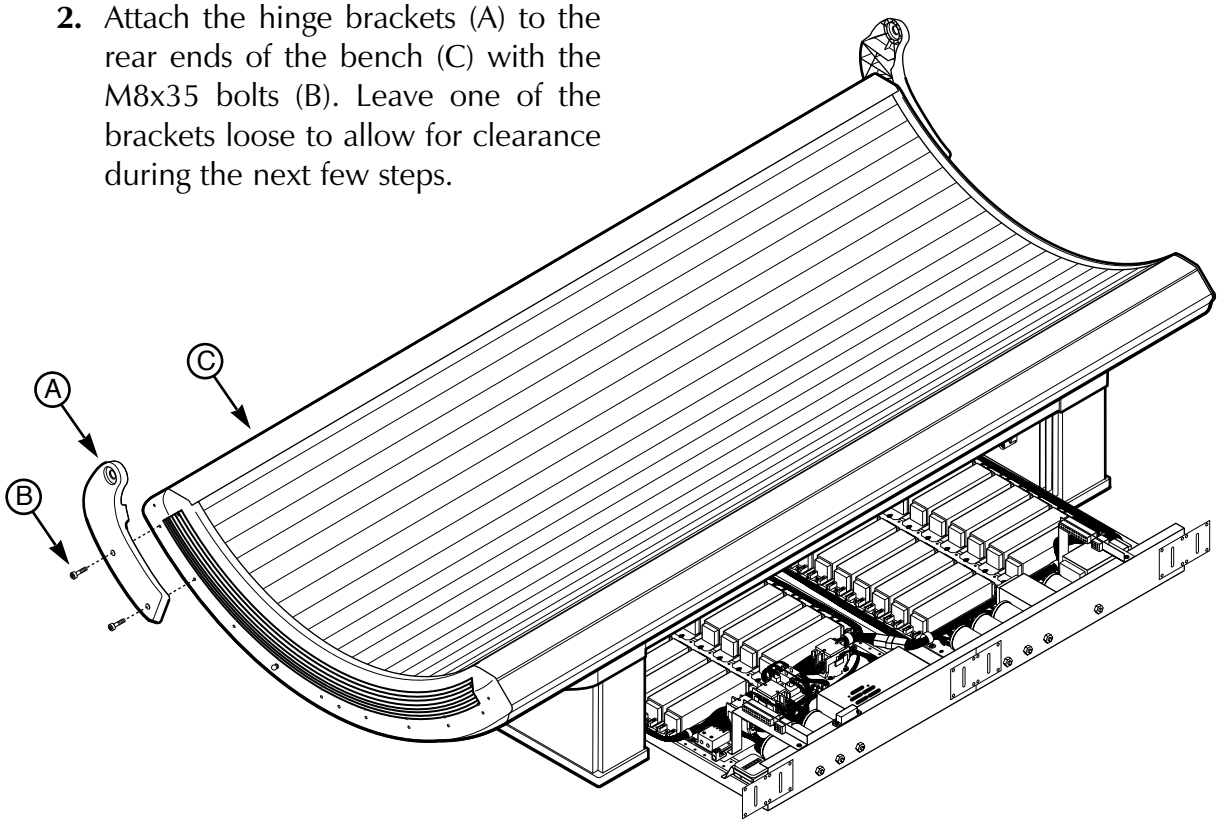
3. Electrically connect the trays together by plugging the 15 pin connector from the bench ballast tray into the canopy ballast tray connector. (See page 12 detail A) Units with face tanners also have a two pin connector in the same location that must be connected.



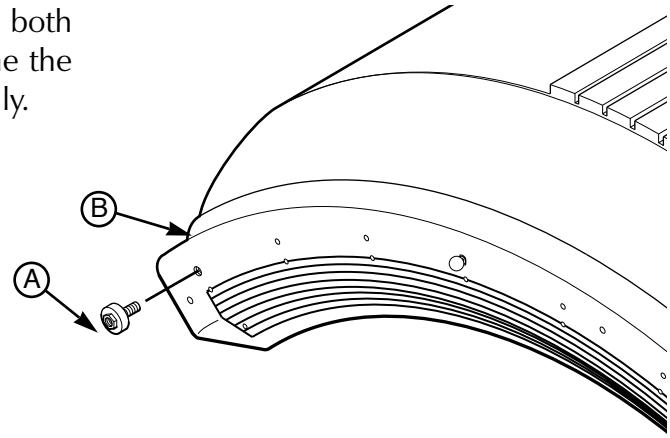
Attaching Canopy to Bench Assembly

1. Place the sunbed bench over the ballast tray assembly as shown. The front of the bench is the side without the metal cover plate on the base.

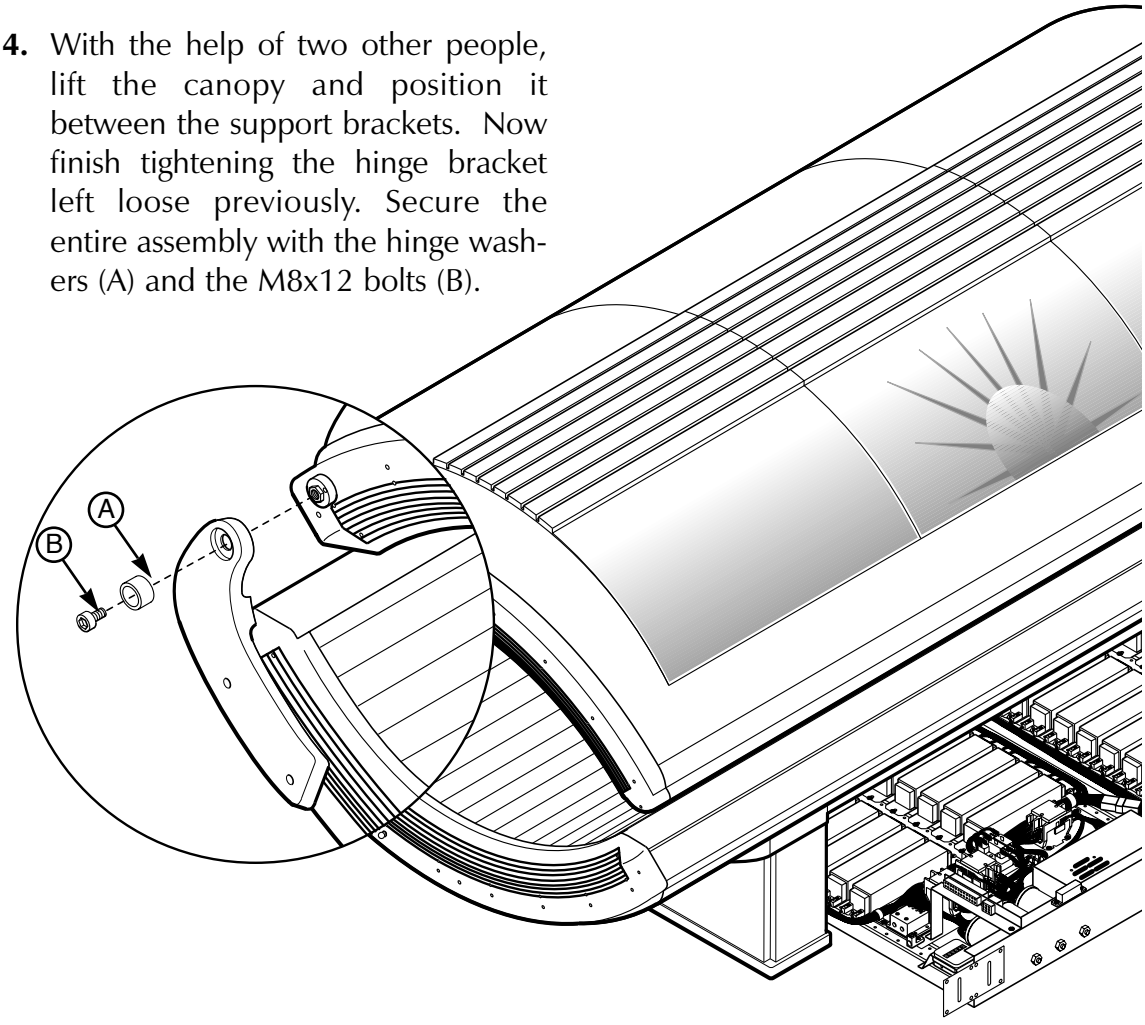
2. Attach the hinge brackets (A) to the rear ends of the bench (C) with the M8x35 bolts (B). Leave one of the brackets loose to allow for clearance during the next few steps.



3. Attach the pivot studs (A) to both sides of the canopy (B) using the the adjustable wrench. Tighten firmly.



4. With the help of two other people, lift the canopy and position it between the support brackets. Now finish tightening the hinge bracket left loose previously. Secure the entire assembly with the hinge washers (A) and the M8x12 bolts (B).



Attaching Gas Springs

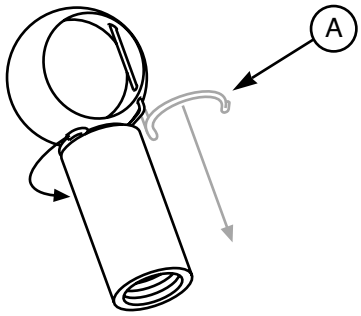


Figure 1

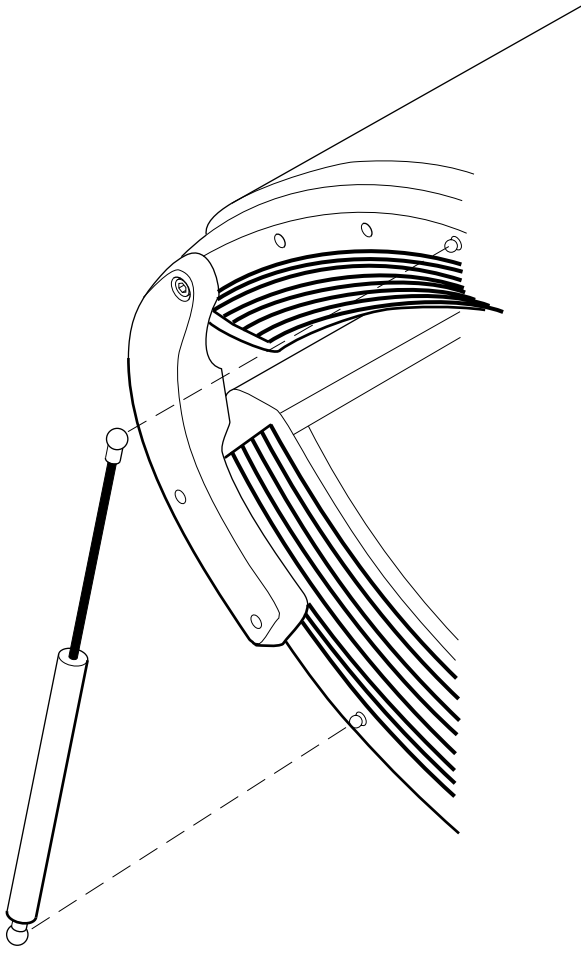
1. Remove the locking clips (A) from the ends of the gas springs. (See figure 1.)

2. Have a helper hold the canopy in its full open position until the gas springs and their locking clips are installed.

3. Align open ends of gas spring ball joints with pivot studs and gently tap into place. Be sure the rod end is up as shown. Replace locking clips.

IMPORTANT! DO NOT lower canopy until both gas springs are in place and the locking clips are installed! Failure to install locking clips may result in the ball joints working loose, allowing the canopy to fall, which may cause serious injury!

4. Lift and lower the canopy a few times to lubricate the seal inside the spring. Keep the canopy closed when not in use.



Electrical Connections

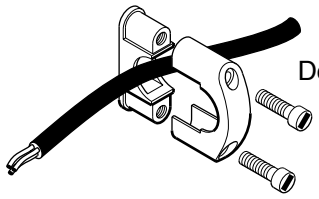
1. Remove the bench's back plate (A) by removing its four screws (B).

2. Slide the gray flexible tubing leading from the canopy into the slot, as shown, about 1 inch.

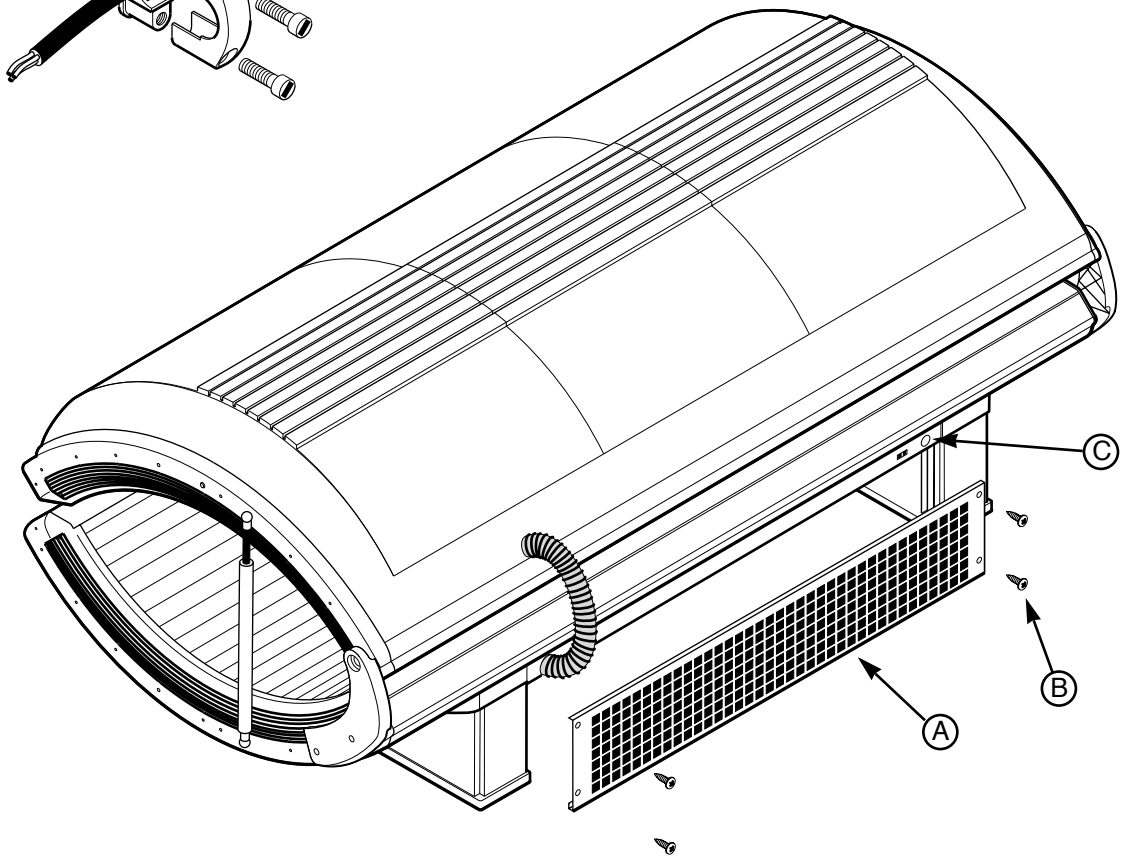
3. Run all the wires coming out of the tube through the front and back cable holders located under the bench on the head end stand leg. (See detail.)

4. Have an electrician provide power to your sunbed's power distribution block located slightly above and to the right of the hour counter in the foot end ballast tray. (Refer to *Pre-Installation Planning)*

5. Route the main power cable and all the wires coming out of the bench through the front cable holder located inside the foot end of the stand. Continue to route the power cable through the back cable holder and then through opening (C) in the back panel. Connect the sunbed directly to a junction box.



Detail of cable holder



Unless otherwise noted refer to the ballast tray illustration on page 12 for the following procedures.

6. Mate the two colored cable assemblies coming from the bench to the matching connectors on the foot end ballast tray (detail B). Be sure to seat the connectors fully. They will snap together.

7. Mate the two colored cable assemblies coming from the canopy to the matching connectors on the head end ballast tray (detail C). Again, be sure that the connection is secure.

8. Route the shielded low voltage cable (D) leading from the canopy as shown. Wire ties have been provided to secure the cable in place where noted on the diagram.

Note: This cable transmits digital communication between the main timer and the timer display located in the canopy. It is important to route the cable as shown to minimize the possibility of electrical interference affecting the communication.

9. Connect the end of the cable to the timer box (figure 1, this page).

10. Verify that all ballast tray wires are routed so that they cannot become caught in the bench fan. If necessary use the extra cable ties provided to secure the wires. Be careful to allow for ballast tray movement.

11. Underneath the bench, along side the ballast trays, are restraining cables (one each side). They are coiled and held in place with plastic wire ties which must be cut. Clip the cables to the ballast trays where shown (page 12).

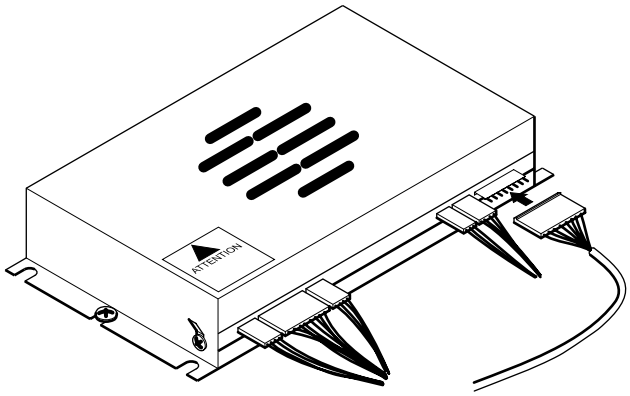
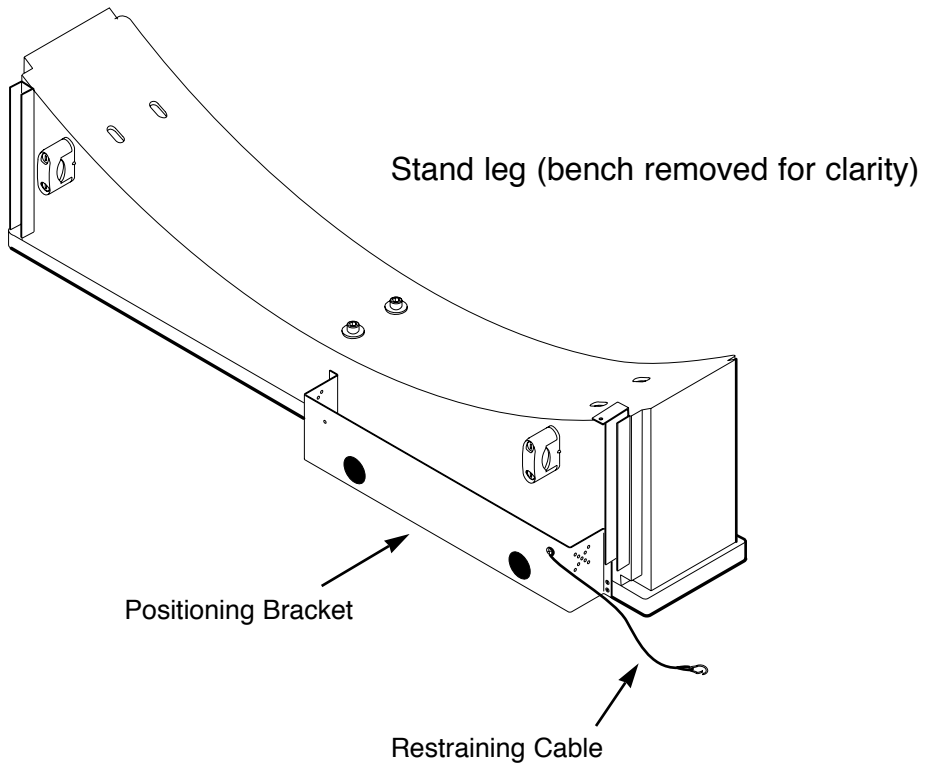


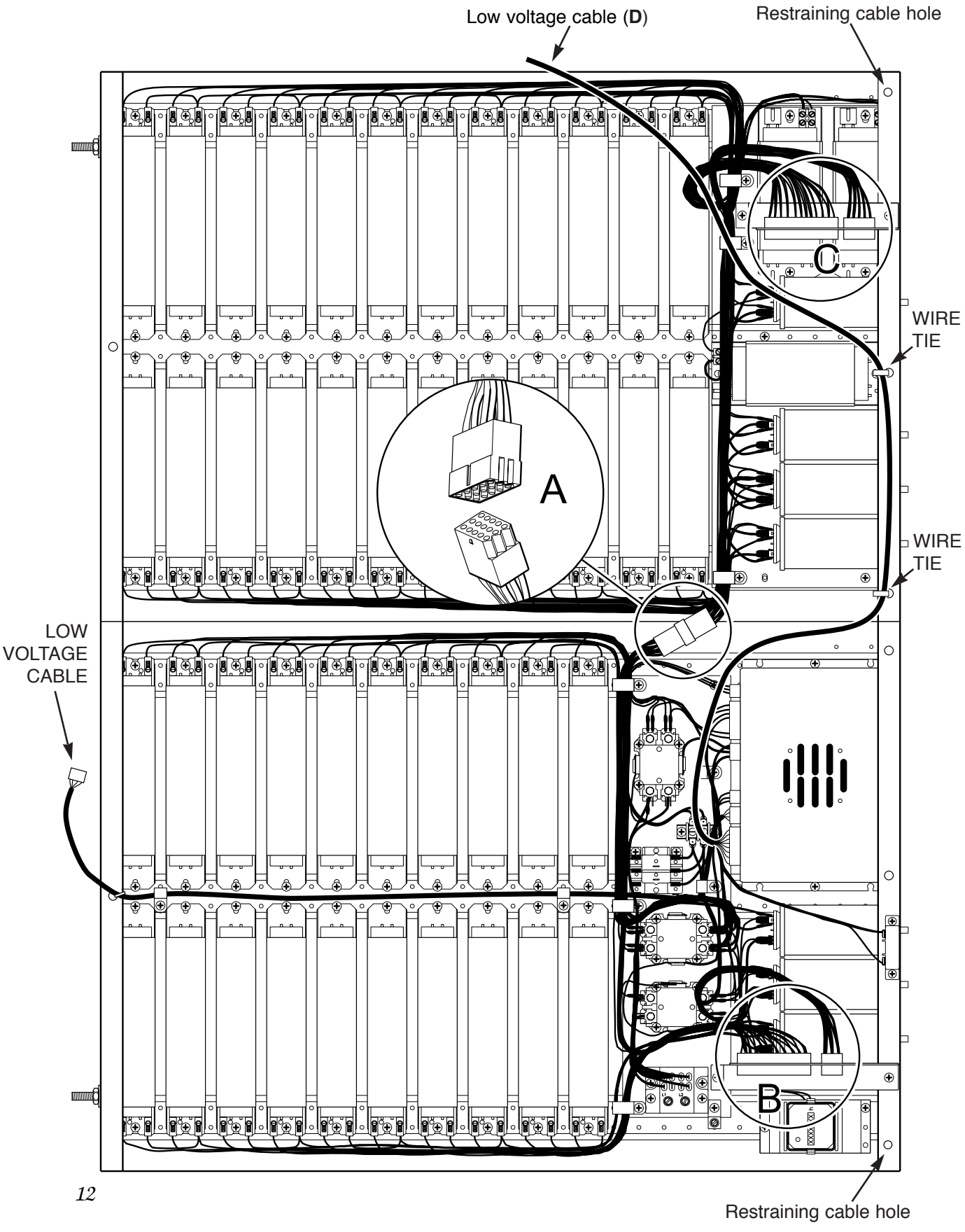
Figure 1

12. Push the ballast tray set all the way under the bed until the tray brackets contact the metal, tray positioning brackets along side the trays. (Refer to illustration below.) Use the remaining #10x1/2" screws to attach the tray brackets to the positioning brackets, using any suitable holes that line up.

13. Attach the front access panel using the access panel key provided.

Note: The front access panel contains one half of a magnetic proximity limit switch which must engage the other half located on the front of the ballast tray. If it does not, an error 9 will be displayed on the timer display and an alarm will sound when the unit is powered-up. Adjust the position of the ballast trays if needed to achieve proper limit switch proximity.




Low voltage cable (**D**)
Restraining cable hole
C
WIRE TIE
A
WIRE TIE
LOW VOLTAGE CABLE
B
Restraining cable hole

Bypass Plug

In the back of the foot end ballast tray is a low voltage cable, coiled and wire tied, with a small package of bubble wrap around the end of it. Cut the wire ties holding the coil and remove the bubble wrap and static bag to reveal the remote port board connected to the end of the cable (see figure 1). Remove the two small screws from the port board and install the board on the inside of the bench's back panel using the screws, as shown in figure 1 and arrow B in figure 2.

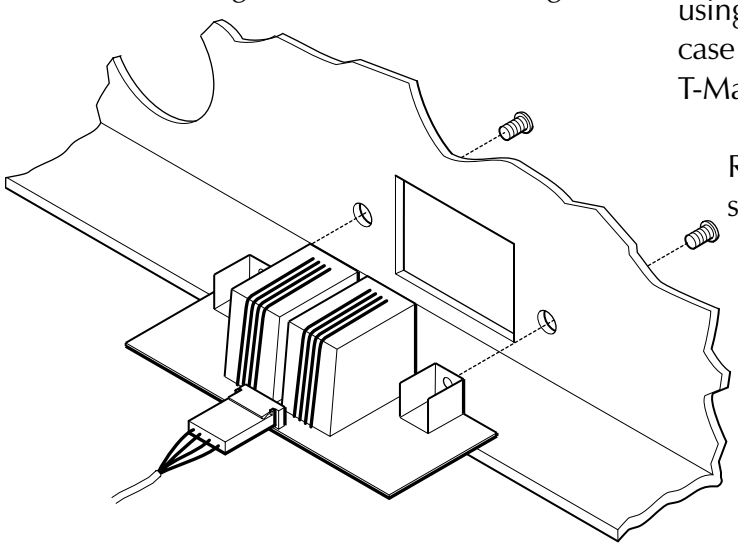


FIGURE 1

Connect the remote control bypass plug (A) into the remote control port (B) as shown in figure 2. The bypass plug can be inserted into either port. Your sunbed will not operate without the bypass plug or a remote system connected. If you plan on using a remote system refer to "*Remote Connections*".

Note: The remote control device is optional and is not included with your sunbed.

Caution: Remove the bypass plug when using a remote system, except for the case when the sunbed is at the end of a T-Max® Manager series.

Replace the back plate with the four screws removed earlier.

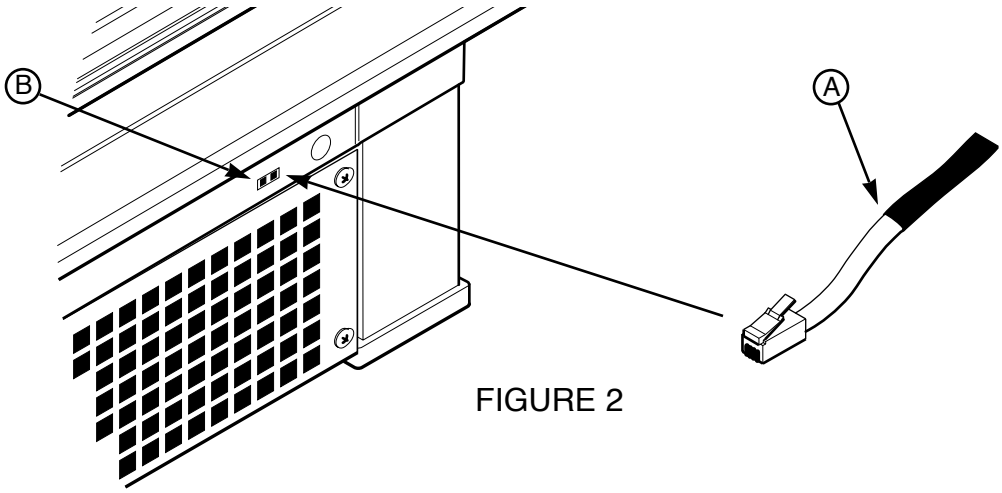


FIGURE 2

Body Fan Assembly

! WARNING!

Make sure sunbed unit is not connected to any power source before attaching body fans.

1. Remove the pre-installed cap, mounting bolt and washers from either end of the sunbed canopy.

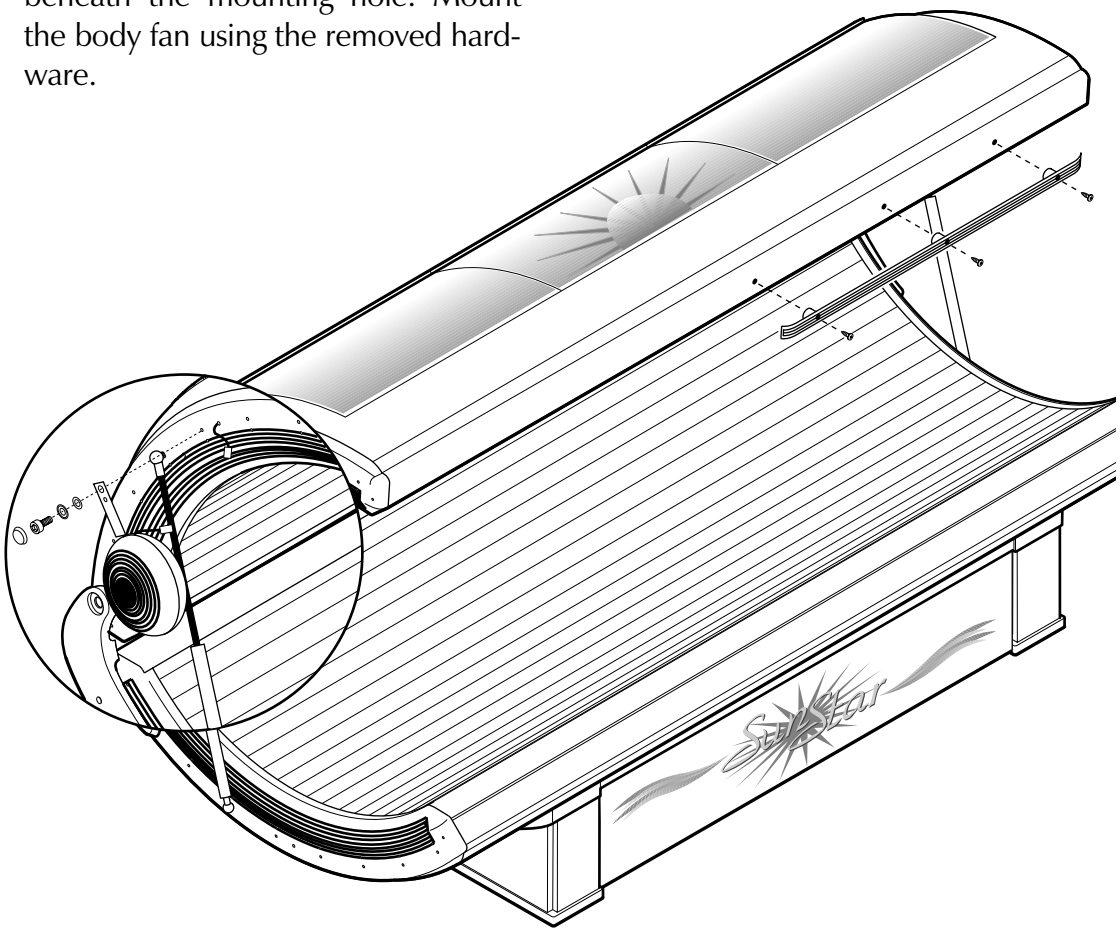
2. Orient the body fan to the endcap so that the metal stud on the bracket is inserted into the hole in the endcap beneath the mounting hole. Mount the body fan using the removed hardware.

3. Replace the plastic cap.

4. Plug the cord from the body fan into the connector from the bed.

5. Repeat steps 1-4 for the other body fan.

6. Attach the sunbed's handle to the canopy, using the three pre-installed #10x1" screws.



Remote Connections

Your sunbed incorporates advanced circuitry allowing it to connect and communicate with most remote control systems. If a remote system is to be used, first determine whether the remote system is a T-Max® System or a standard remote system operating with a control relay. Follow the appropriate instructions for your system type.

Warning: The remote connection is not designed to supply or accept high voltage, nor can it provide power to an external timer. The sunbed's remote interface circuitry operates on 5 volts, attempting to connect it to any higher voltages will damage the sunbed as well as void your warranty.

T-Max® Manager Remote System

The T-Max® Manager remote system offers the ultimate in sunbed control, while allowing the tanner easy straightforward operation. This system is ideal for multiple sunbed installations. Your sunbed is already configured to directly connect to this system. The circuitry inside your sunbed eliminates the need for the T-Max® 1A when connecting to the T-Max® Manager series. To connect your bed to this system follow the instructions that came with your remote system, noting *figure 2* on the next page. After you have set the address, or "id" of each sunbed, simply connect the RJ-22 Modular cable(s), described in the T-Max® Manager manual, directly into the port(s) located on the back of your sunbed. You can place your sunbed at any location in the series. Remember the last connection in the series requires a T-Max® terminator plug or Sunstar™ bypass plug.

T-Max® 1A Remote System

The T-Max® 1A offers the same control as the T-Max® Manager in single sunbed installations. For this, your 1A must be configured as a "master". If the 1A is not configured as a master it will not work in this application.

After you have set the address, or "id" on the sunbed simply connect the RJ-22 modular cables, described in the T-Max® user's guide, directly into either port located on the back of the sunbed and either port on the back of the T-Max® 1A. If the T-Max® 1A and the sunbed are more than 100 feet apart, terminators or SunStar® Remote Bypass plugs should be installed in the unused ports. See *figure 1*.

Setting the address

Before connecting your sunbed to the T-Max® Manager or T-Max® 1A, the address or "id" of your sunbed must first be set. The auto-addressing feature of the latest T-Max® Manager models is not compatible with this sunbed. Set the "id" manually as described below.

Setting the "id"

1. Verify that the sunbed display is indicating a "0".

2. Press and hold the stop button located on the sunbed display for three seconds and release. The display should indicate an "id" number from 1 to 99.

3. If you are using a T-Max® 1A as your remote the "id" of the sunbed must be set to "1". If you are using a T-Max® Manager each sunbed must be assigned a different "id". To set the "id" press the timer button until the desired number is achieved.

4. Press the stop button to return to the normal display mode.

5. If you are using a T-Max® 1A its "id" must be set to "0.0". See your 1A manual for instructions. Also refer to your T-Max® 1A or Manager manuals to set other functions such as delay time and number of beds in the T-Max® Manager series.

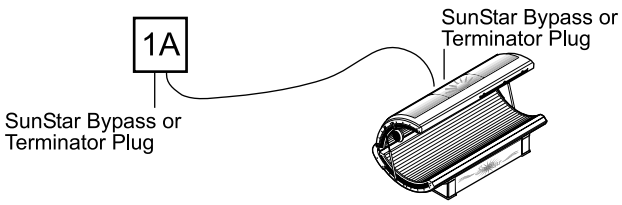


Figure 1

Remote systems using a Control Relay

Most non-T-Max® remote systems control the sunbed by the use of a relay. The relay operates the sunbed by connecting and disconnecting a pair of wires leading from the sunbed. Refer to the user's manual provided with your remote system to determine if it operates in this way. To connect your sunbed to this type of system a remote interface kit is required. Call ETS at the phone number listed on the back of this guide to obtain the kit. *Figure 3* below details a typical connection. Follow the instructions provided with the kit and from the remote's manual to make the necessary connections.

If you have questions consult the Troubleshooting guide in this manual or call ETS at the phone number listed on the back of this guide.

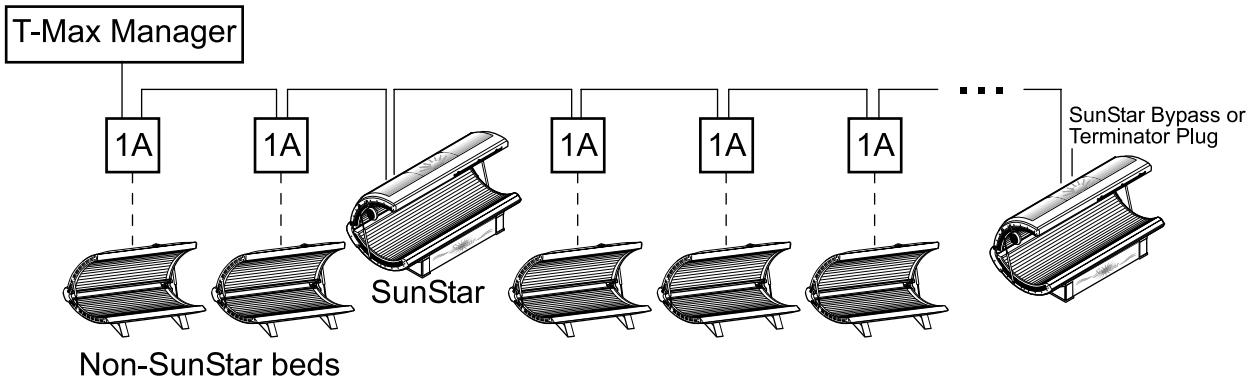


Figure 2

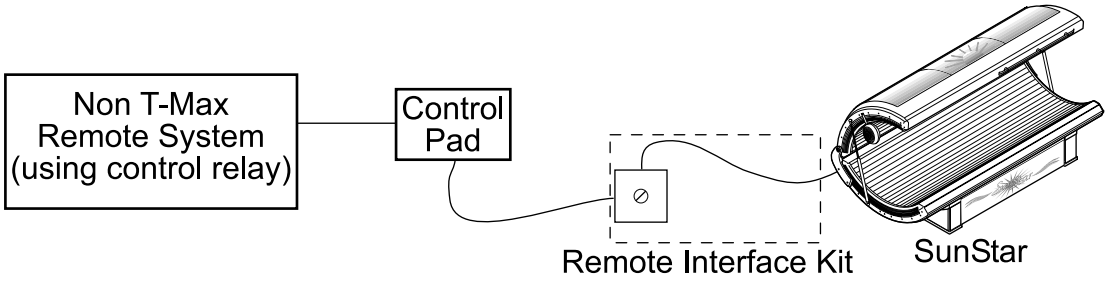


Figure 3

Operation

Before You Tan

Before using your sunbed, please note the following important precautions:

- **WARNING!** Your sunbed is designed for individual use. Only one pair of protective goggles is provided. **Always** wear these or another approved pair of goggles. Regular sunglasses **do not** provide adequate protection from ultraviolet light. You should never look at the lamps when turned on without wearing the appropriate protective goggles.

- Your skin should be free of cosmetics, tanning oils, or other body lotions prior to tanning except for those specifically made for use with tanning devices. However, do not remove natural body oils by bathing or showering immediately before tanning.

- Your hair should be free of gels, mousses, sprays, or other hair products prior to tanning. These products can cause damage to the sunbed acrylic. As an alternative, a shower cap or towel can be worn to keep treated hair away from the sunbed surfaces.

- Some medication may **increase your sensitivity** to ultraviolet light. It is recommended that you consult a physician before using this sunbed if taking any medication or if you suspect that your skin might be especially sensitive to sunlight. Included with this manual is an FDA booklet on medications that increase sensitivity to light.

- As with all electrical appliances, **do not operate this device near water or while you are wet.**

Exposure Times

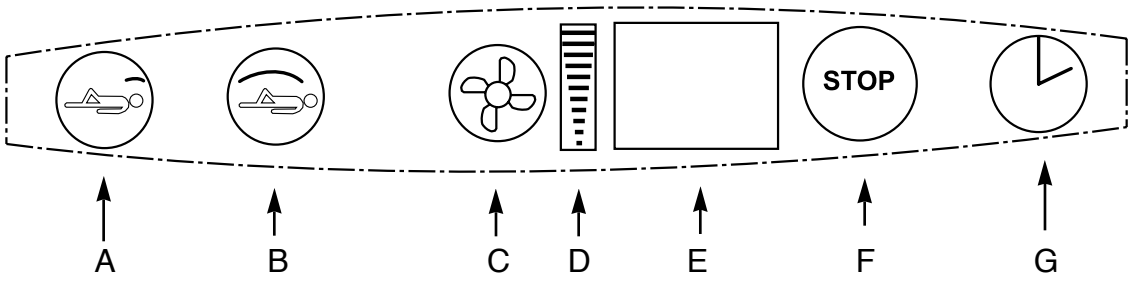
We recommend that you tan every other day, following the tanning times in the exposure schedule. Tanning normally appears after the first few sessions and maximizes after approximately four weeks. Tan once or twice per week thereafter to maintain appearance. Persons already having a base tan may begin at advanced levels corresponding to the extent of their base tan.

Follow the guidelines for skin type and exposure times as shown in the table below.

RECOMMENDED EXPOSURE TIMES IN MINUTES						MAXIMUM EXPOSURE TIME IS 10 MINUTES
Skin Type:	Week # / Session #	Week 1 1st-3rd	Week 2 4th-6th	Week 3 7th-10th	Week 4 11th-13th	Subsequent Maximum
I Sensitive Skin	(Burns easily and severely and does not tan.)	NOT RECOMMENDED FOR TANNING				
II Light	(Burns easily and severely and tans minimally.)	2	4	6	8	10
III Normal	(Burns moderately and tans average.)	3	5	7	10	10
IV Dark	(Burns minimally, tans easily and above average.)	4	6	8	10	10

Using Your Sunbed

When connected to the T-Max® Manager



A **Face tanner control** - *Turns face tanner on and off during use. (Units equipped with face tanner only)*

B **Main lamp control** - *Turns body lamps on and off during use. (Units equipped with face tanner only)*

C **Body fan control** - *Controls the speed of the body fan during use.*

D **Body fan speed indicator** - *Indicates speed of fan. (OFF - LOW - MED - HIGH)*

E **Timer display** - *Displays remaining time.*

F **Stop button** - *Turns lamps off.*

G **Timer button** - *Turns bed on. Timer display shows remaining time. If a lesser time is desired, repeatedly press timer button until desired time is displayed.*

1. Lift the canopy, lie down on the bench (face up), and lower the canopy toward your body using the canopy handle. For best results, position the canopy as close as possible to your body. For units with face tanners, maintain at least 1 inch between the face tanner and your face.

2. Assuming the remote system has been set to allow a pre-tanning delay time, the timer display (E) will repeatedly flash the delay symbol "dL" and then the remaining delay time. Press the timer button (A) or wait until the delay time has expired to begin the tanning session. The lamps will turn on and the timer will begin to count down. The sunbed will not allow a session time greater than the sunbed's maximum exposure time. *If the timer did not display a "dL", see Troubleshooting.*

3. If a tanning time less than the displayed time is desired repeatedly press the timer button to decrease the remaining time.

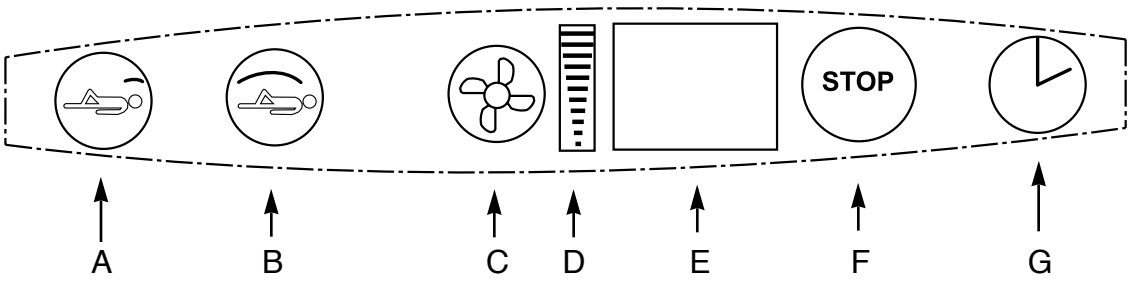
4. When the timer reaches 0 the lamps turn off. If you want to stop your session before time expires press the stop button (F).

5. Raise the canopy by using the handle, do not push-up on the acrylic shield. The cooling fans run for 3 minutes after the lamps shut off to aid in cooling the sunbed. The timer will then indicate ". .", this is a reminder to clean the sunbed. After the sunbed is cleaned press the start button and the display will return to "0".

Using Your Sunbed

When configured as a stand alone unit or when connected to a remote system using a control relay.

If your sunbed is connected to a T-Max® Manager remote system, turn to *Using Your Sunbed When connected to the T-Max® Manager*.



A **Face tanner control** - *Turns face tanner on and off during use. (Units equipped with face tanner only)*

B **Main lamp control** - *Turns body lamps on and off during use. (Units equipped with face tanner only)*

C **Body fan control** - *Controls the speed of the body fan during use.*

D **Body fan speed indicator** - *Indicates speed of fan. (OFF - LOW - MED - HIGH)*

E **Timer display** - *Displays remaining time.*

F **Stop button** - *Interupts timer circuitry. You may restart with remaining time within 10 seconds. After 10 seconds timer resets to 0 minutes.*

G **Timer button** - *Turns bed on. Timer display shows remaining time. If a lesser time is desired, repeatedly press timer button until desired time is displayed.*

1. Lift the canopy, lie down on the bench (face up), and lower the canopy toward your body using the canopy handle. For best results, position the canopy as close as possible to your body. For units with face tanners maintain at least 1 inch between the face tanner and your face.

2. Start the sunbed by pressing the timer button (G), located at the head end of the canopy. The lamps will turn on and the timer display (E) will indicate the session time remaining. If less than the maximum tanning time is desired, repeatedly press the timer button (G) until the desired time is indicated.

3. When the timer reaches 0, the lamps will turn off. If you want to stop your session before time expires press the stop button (F). The sunbed will then allow you ten seconds to reactivate the bed with the unused time. After ten seconds the timer system resets back to 0 minutes.

4. Raise the canopy by using the outer edge of the canopy, do not push-up on the acrylic shield. The cooling fans run for 3 minutes after the lamps shut off to aid in cooling the sunbed.

Care & Maintenance

Cleaning After Use

Clean and disinfect your tanning bed's bench and canopy after each use. Use a non-abrasive disinfectant cleaner that **does not contain ammonia or ammonia derivatives**. Ammonia may damage the acrylic shield. Spray the acrylic lightly with disinfectant and wipe dry with a clean soft cloth. We recommend *SunQuest®* disinfectant and *SunQuest®* acrylic cleaner.

Thorough Periodic Cleaning

Introduction

The cooling fans draw air through the bed and over time will cause a dust buildup in the sunbed's air filters. Clean these filters monthly. The filters are located on the bottom of both ends of the bench and on the canopy underneath the top covers. They are held in place by velcro strips. Clean the filters using a vacuum or with mild soap and water.

Occasionally, dust will pass by the filters causing a buildup on your sunbed's lamps and reflectors. This will reduce the tanning effectiveness of the bed. When a dust buildup is observed, it is necessary to thoroughly clean the inside of the bench and canopy.

Warning! Disconnect sunbed from electrical power before cleaning.

Cleaning the Canopy and Bench

Step 1. Remove the acrylic shields and lamps as described in *Replacing Lamps*.

Step 2. With a soft cloth, wipe the entire length of each lamp to remove any film buildup.

Step 3. Clean both sides of the acrylic shields with a non-ammonia disinfectant cleaner.

Step 4. Wipe the reflectors with a clean damp cloth.

Step 5. Re-install the lamps and acrylic shields.

Mechanical Inspection

Your tanning bed has been built for years of service. To ensure trouble-free operation throughout its life, inspect the unit's mechanical integrity every 400-500 hours of use.

- Inspect the unit's fasteners verifying that all are firmly in place.
- Inspect gas springs for signs of wear. Gas springs that will not steadily hold up the canopy should be immediately replaced. See *Troubleshooting*.
- Inspect the AC power cable and its connections.
- Inspect the acrylic. Broken, cracked or badly scratched acrylics should be immediately replaced.

Replacing Lamps

Introduction

Your sunbed has an hour meter located in the foot end of the ballast tray which keeps track of how many hours the sunbed has been in operation. Use this meter to determine when your tanning lamps should be replaced. To be assured of maximum tanning effectiveness, change the lamps after approximately 800-1000 hours of use. Tanning will continue after this time but at a slower rate. To ensure trouble-free operation of your sunbed, replace the lamp starters whenever the lamps are replaced.

Warning! Disconnect sunbed from electrical power before servicing.

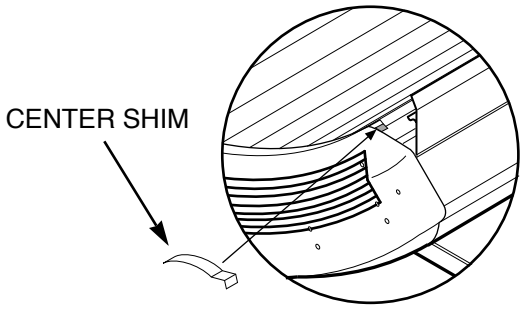


Figure 1

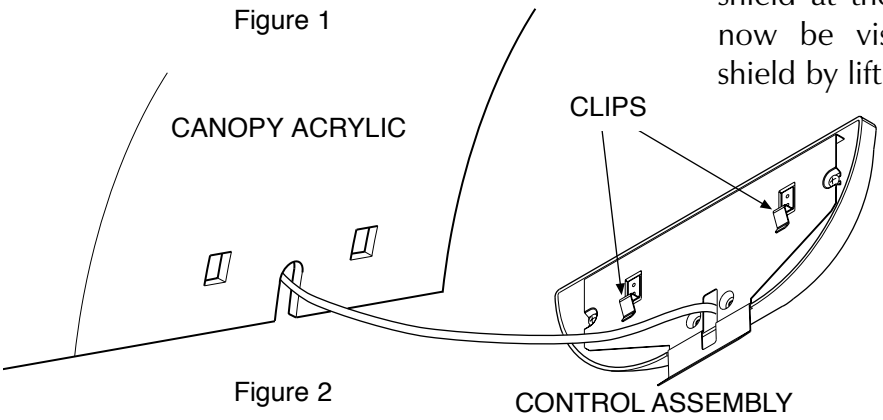


Figure 2

Removing/Replacing Acrylic Shields

Step 1. The acrylic shields in the canopy and bench are both secured in place by acrylic covers which run the length of the canopy and bench, both front and back. To remove the acrylic shield gently pry up on acrylic side of the cover, working your way along the full length of the acrylic shield until the cover is released. Repeat for the other cover. The edges of the acrylic are now exposed.

Step 2. Remove the sprung steel acrylic center shims from both ends of the acrylic, front and back. (See figure 1, at left)

Step 3. Remove the control assembly from the canopy acrylic by sliding it upward until its clips disengage. (See figure 2, below)

Step 4. Slide the acrylic shield toward the head or foot end of the bed. The short edge of the acrylic shield at the opposite end will now be visible. Remove the shield by lifting from this end.

Step 5. Replace the acrylic shield by reversing the above steps.

Removing/Replacing Lamps

After removing the acrylic shield, replace lamps as follows:

Step 1. Grasp the lamp at one end and at the middle, then turn the lamp a quarter turn. The lamp may then be gently removed from its holder.

Step 2. To re-install a lamp, insert the pins located on the ends of the lamp into the slots on top of the lamp holder and turn the lamp a quarter turn.

Recommended Replacement Lamps

We recommend using the lamps specified below. Use of uncertified lamps is a violation of federal regulations and will void your warranty. These lamps have an average life of 800-1000 hours of effective tanning use. Lamps used longer than that begin to lose their effectiveness even though they will continue to light.

*Only the following lamp types have been certified for use in your **SunStar** Solarium*

Application	Lamp Model Number
Super ZX44 VS-R™	ACCELERATOR® VS-R™ Wolff® Model VAC75-T12-160W VS-R Bi-Pin ACCELERATOR® VHO Wolff® Model ACC75-T12-160W BI-PIN
Super ZX44 VS-R™ 3F	ACCELERATOR® VS-R™ Wolff® Model VAC75-T12-160W VS-R Bi-Pin ACCELERATOR® VHO Wolff® Model ACC75-T12-160W BI-PIN
(Facial unit)	Philips Model HPA 400/30s CosmoTech Model 23045 CosmoTech Model 20046

Removing/Replacing Face Tanner Lamp on F Models

After removing the canopy acrylic shield, replace the face tanner lamp as follows:

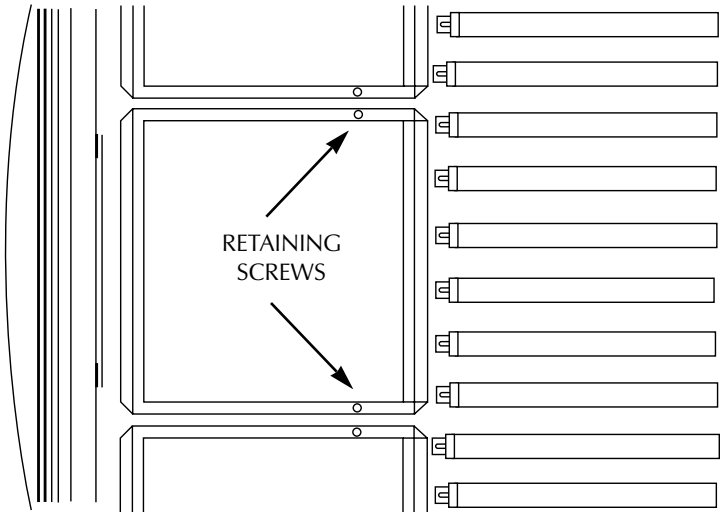
Step 1. Support the face tanner assembly with your hand while unscrewing the two retaining screws. The face tanner glass casing will now swing downward.

Step 2. The lamp can now be exchanged. The lamp holders are equipped with spring contacts which enables the lamp to be removed easily. Remove the old lamp and discard. Install the new lamp, using a clean cloth or paper towel. Ensure that the lamp is firmly seated in the lamp holders.

Note! Never take hold of the lamp such that your fingers are in contact with the lamp glass. Finger oils will greatly reduce the lamp's operational life.

Step 3. Gently close the face tanner glass casing and lock it closed with the screws. Ensure that the screws firmly secure the glass casing.

Warning! Never turn the equipment on while the face tanner is disassembled or when the glass filters have been removed. The direct light can cause severe injury to the eyes and to other areas of the body. Immediately discontinue use of this equipment if the face tanner glass is broken or if any unfiltered light can be seen escaping the face tanner assembly.



Troubleshooting

Problem	Solution
Sunbed not tanning	1. Clean sunbed, see *Thorough Periodic Cleaning*. 2. Ensure supply voltage is between 208 and 230V AC. 3. Replace lamps if lamp hours are greater than 800hrs. 4. Replace acrylic.
Lamps fail to light and timer display is blank	1. Make sure the unit is connected to a power source. 2. Check source of AC power. Reset circuit breaker or replace fuse.
Timer display changes to indicate a tanning time after the timer button is pressed but lamps do not come on	1. Bypass plug is not installed see *Electrical Connections*. 2. A non-SunStar® bypass has been used. See *Electrical Connections*. 3. If remote is being used, other than T-Max® Manager, the external timer may not be activated, or... 4. remote wiring is incorrect, see the instructions provided with the remote interface kit.
My bed is connected to the T-Max® Manager remote system and when the delay time has expired the timer display starts counting down but the bed lights do not come on	The auto start feature of the remote system is disabled, see the instructions provided with your remote system.
My bed won't work with the T-max® Manager remote systems	1. The sunbed must first be set to a unique address see *Remote Connections*. 2. The bypass or terminator plug may be installed in the series in an inappropriate location. Plug the bypass plug only into the bed at the end of the series.
Timer display continues to show a 0 after the timer button is pressed	1. T-Max® Manager remote system has not yet been set. 2. Sunbed address is not set correctly see *Remote Connections*.
The last minute of tanning time does not count down from 59 seconds, but some time less than 59 seconds	If the timer button has been pressed to decrease tanning time during the session, the time expired in the current minute is subtracted from the last minute.

Problem	Solution
One or more lamps fail to light	1. Check that lamp is installed correctly. 2. Switch unlit lamp with a lamp that lights, if new lamp lights and old lamp still does not, replace old lamp.
The face tanners will not come on	1. Face tanner operation is initially delayed by 5 seconds. 2. Face tanners will not re-light until cooled. 3. Replace face tanner lamp, see *Removing/Replacing Face Tanner Lamp on F Models*.
The canopy will not stay up	NOTE: Gas springs are manufactured to hold the canopy in its fully open position as well as allow it to rest fully closed. If left open for an extended period of time some creep down may occur. This is considered normal. Keep the unit closed when not in use. If the canopy will not stay fully open when raised... 1. raise and lower the canopy a few times to lubricate internal gas spring seals. 2. replace gas springs.
My bed is connected to a T-Max® remote system but I am having trouble getting into "id" mode.	You have probably attempted to connect your sunbed to the remote system already. Disconnect the remote plug(s) from the ports at the back of the sunbed, wait 90 seconds and try again.
My bed, connected to a T-Max® Manager, did not display "dL" but does indicate: "0". a tanning time and the lamps have come on. a tanning time but the lamps have not come on.	 1. Remote device has not been set. 2. The sunbed has not been connected to the remote system, see *Remote Connections*. 1. Delay time of T-Max® Manager has not been set. 2. Delay time has expired and session has begun. Auto start function of T-Max® Manager has been turned off. Press the timer button to turn on lamps
Timer display is indicating Er 1	Body lamps are on when they should be off, have service technician check the contactor.
Timer display is indicating Er 2	Body lamps are off when they should be on, have servicer check contactor and its wiring from the main timer box.

Problem	Solution
Timer display is indicating Er 3	Bench lamps are on when they should be off, have service technician check the contactor.
Timer display is indicating Er 4	Bench lamps are off when they should be on, have service technician check the contactor and its wiring from the main timer box.
Timer display is indicating Er 5	Not currently used
Timer display is indicating Er 6	Not currently used
Timer display is indicating Er 7	Face Tanner contactor is closed when it should be open, have service technician check the contactor.
Timer display is indicating Er 8	Face Tanner contactor is open when it should be closed, have service technician check the contactor and its wiring from the main timer box.
Timer display is indicating Er 9	Ballast Drawer is open or drawer switch is broken.
Timer display is indicating Er 10	Timer computer is in an illegal state, reset power to correct, replace main timer if error reoccurs.
Timer display is indicating Er 11	Timer computer is in an illegal state, reset power to correct, replace main timer if error reoccurs.
Timer display is indicating Er 12	Timer computer is in an illegal state, reset power to correct, replace main timer if error reoccurs.
Timer display is indicating Er 13	Timer computer is in an illegal state, reset power to correct, replace main timer if error reoccurs.
Timer display is indicating Er 14	The timer display is not responding; 1. Check cable to display. 2. Replace display assembly. 3. Replace main timer box.
Timer display is indicating Er 15	Timer computer is in an illegal state, reset power to correct, replace main timer if error reoccurs.

CALL FOR SERVICE OR QUESTIONS:
1•800•449•3605

6270 Corporate Drive
Indianapolis, IN 46278-2900

Record this information for ease of service
Date Purchased _____
Canopy Serial Number _____
Bench Serial Number _____